Daniel Mandelli

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EDUCATION
University of Rhode Island, Kingston, RI
Bachelor of Science in Computer Engineering, Dean's List 2015-2019
Nelson C. White Award recipient (Class Rank 2)

TECHNICAL SKILLS
Programming: Python, C++, C, C#, Java, Solidity, SQL, HTML5, CSS, JavaScript, PHP, ADA, VHDL, VBA
Technologies: Git, Bootstrap 5, QT, .Net, JQuery, MATLAB
Computer applications: Github, gdb / cgdb, VS Code, Multisim, PSpice, Matlab, Mathematica, Microsoft Office
Operating Systems: Linux, Windows, Android, Ubuntu, MacOS, IOS
Hardware: Altera FPGA, Raspberry Pi, Arduino Microcontroller, Electronics testing equipment
Languages: Fluent in Portuguese, Competent in Spanish

TECHNICAL EXPERIENCE

Vector Software, East Greenwich, RI

Software Engineer   June 2019 - September 2022
- Full Stack development using Python and C++ to improve VectorCAST/Coupling technology.
- Direct the coding and documentation process of new features.
- Use Python to verify code changes using unit and system testing strategies.
- Utilize HTML, CSS, and Javascript to design and implement front-end reporting interfaces.
- Interact with developers and QA to integrate features into a product release.

Software Developer Intern   January 2019 - May 2019
- Implement functionality using C++, Python, and ADA to improve VectorCAST technology.
- Write test cases in Python to test features and bug fixes.
- Learn the development process from writing code, testing, documentation, and working with QA.

URI Microarchitecture Research Insights Laboratory, Kingston, RI

Computer Architecture Researcher   May 2018 - December 2018
- Conduct research involving the realization of new and innovative branch prediction methods.
- Use TAGE-SC-L predictor as a base model and CBP-2016 hardware simulators to design and test ideas.
- Programming in Python, C++, C, and VBA to expand base model and analyze data to best improve performance in the simulation.

University of Rhode Island, Kingston, RI

Undergraduate Teaching Assistant   Fall 2018
- Assisted in the management of a lab section for an undergraduate Computer Engineering course.
- Worked with students regarding hardware simulation of assembly language in Ubuntu.

SENIOR CAPSTONE DESIGN PROJECT
FM Approvals: LumiNotify - Automated Light Intensity Measurement for Visual Notification Appliances
- Designed an automated system in C# and Python to control stepper motors and collect light measurements at predetermined angular increments. All results are compiled and easily accessible to end users.
- Built and interfaced the system with a GUI written in C# on the .NET Framework.
- Established connection with an SQLite database to communicate between the GUI and Python script.